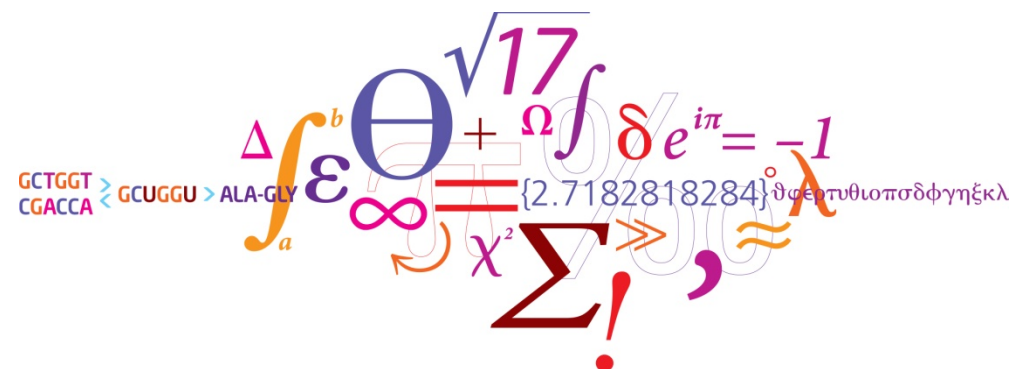
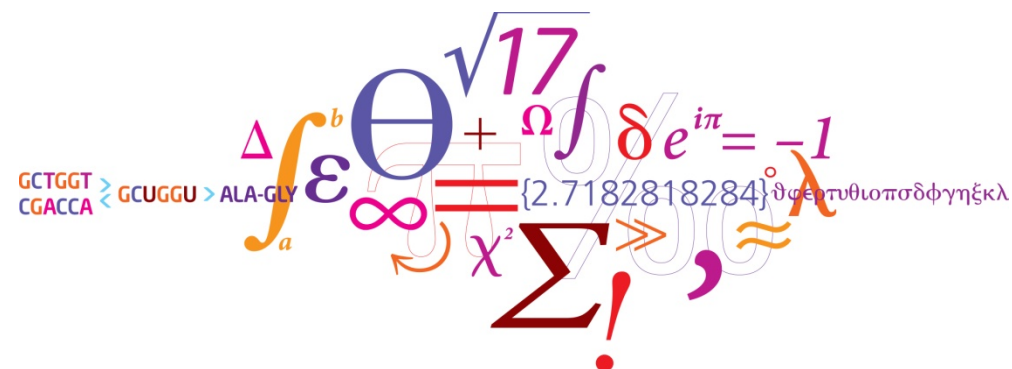


Project Management, episode 3

Irene Kouskoumvekaki



Project Planning



The Purpose of Planning is both..

- Process oriented
 - Creates mutual learning experience and common understanding
- Product oriented
 - Produces the plan, which is the base for execution and control

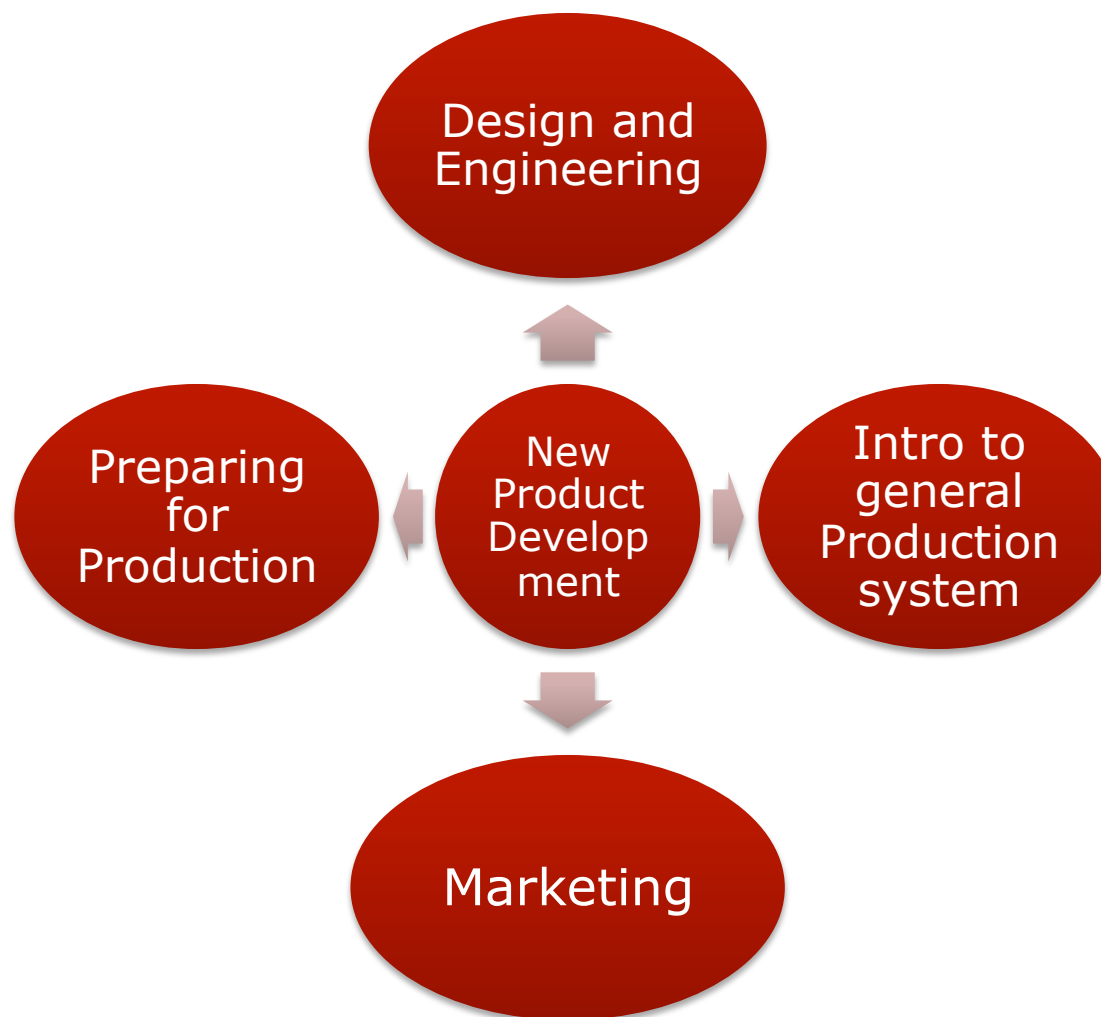
Principles of Project planning

- It should be motivational
- It should encourage involvement
- It should engage commitment
- It should provide the basis for monitoring and control at different levels and by different responsible parties
- It should easily implement revisions of itself
- It should have clear connections between global and detail planning

Project planning

- Global planning
 - What should be accomplished (milestone planning)
- Detail planning
 - How it should be accomplished (activity planning)

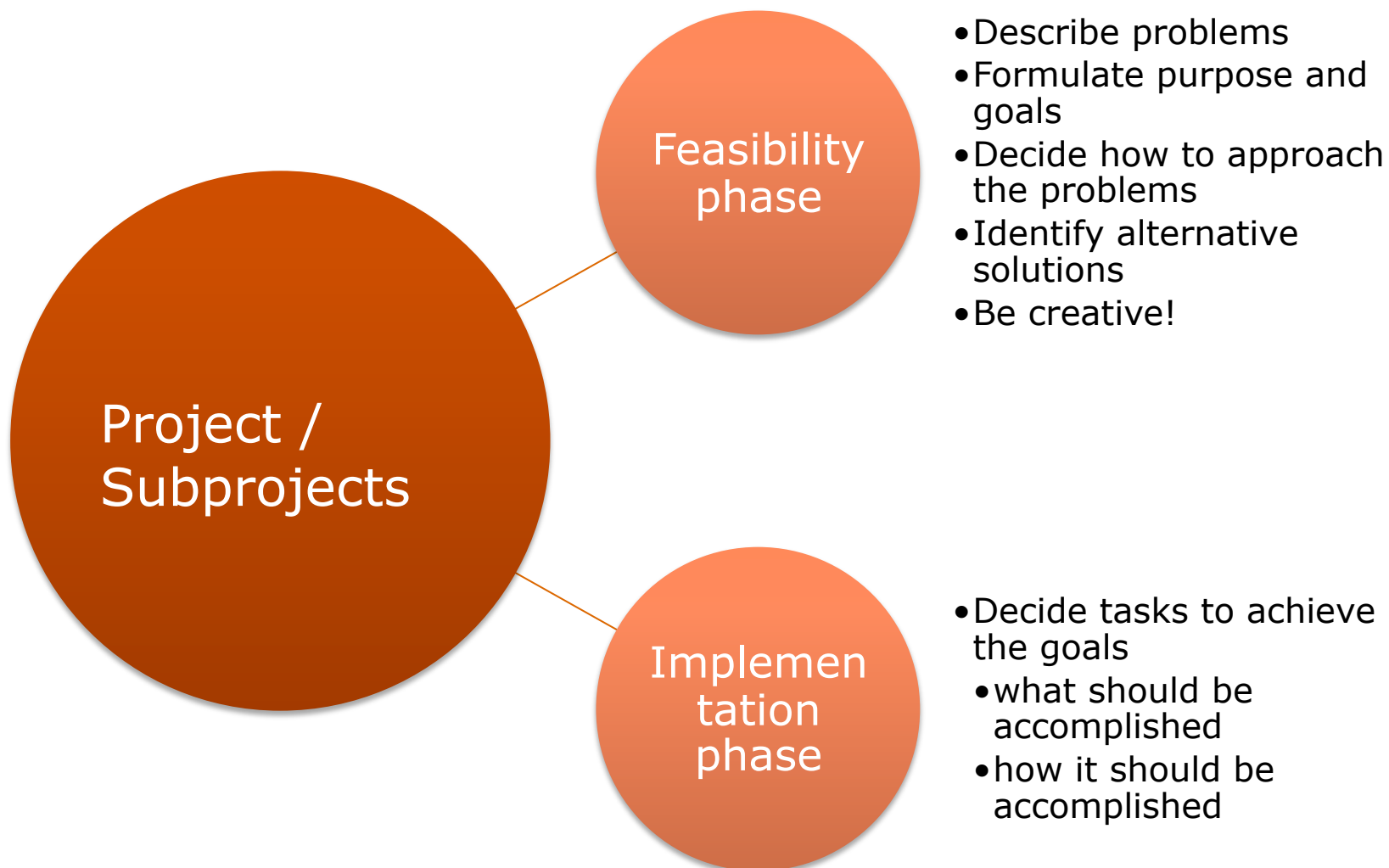
Segmentation of Project into Phases



Reasons for segmenting a project

- The project is large
- The project is long-term
- It is advantageous to have several parallel sub-projects
- Information is not available to plan the project as one unit
- The project has several natural phases with completely different contents

Segmentation of project



Global (milestone) planning

- A milestone is a checkpoint in the project that ensures that we are on the right track
- It describes what the project should achieve, NOT how
 - Example: Being awake at 6.00 am (**state**)
How? (**activity**)
 - Go to bed early
 - Put an alarm clock
 - Ask somebody to wake you up
 - Stay awake the whole night

Global (milestone) planning

- A milestone should be neutrally stated in regards to ways of obtaining it
 - Neutral milestones give more freedom of choice and better quality control
- Example:
- The employees have specified knowledge in a given area (**neutral**)
 - The employees have completed course X (**bound to a certain activity**)

More about milestones

- A milestone should be controllable
- A milestone text may comprise two elements
 - The state to be achieved
 - Conditions necessary to achieve this state
 - Example:

The employees have specified knowledge in a given area *after an aproved training program*
(**conditional requirement**) → easier to be quality controlled

More about milestones

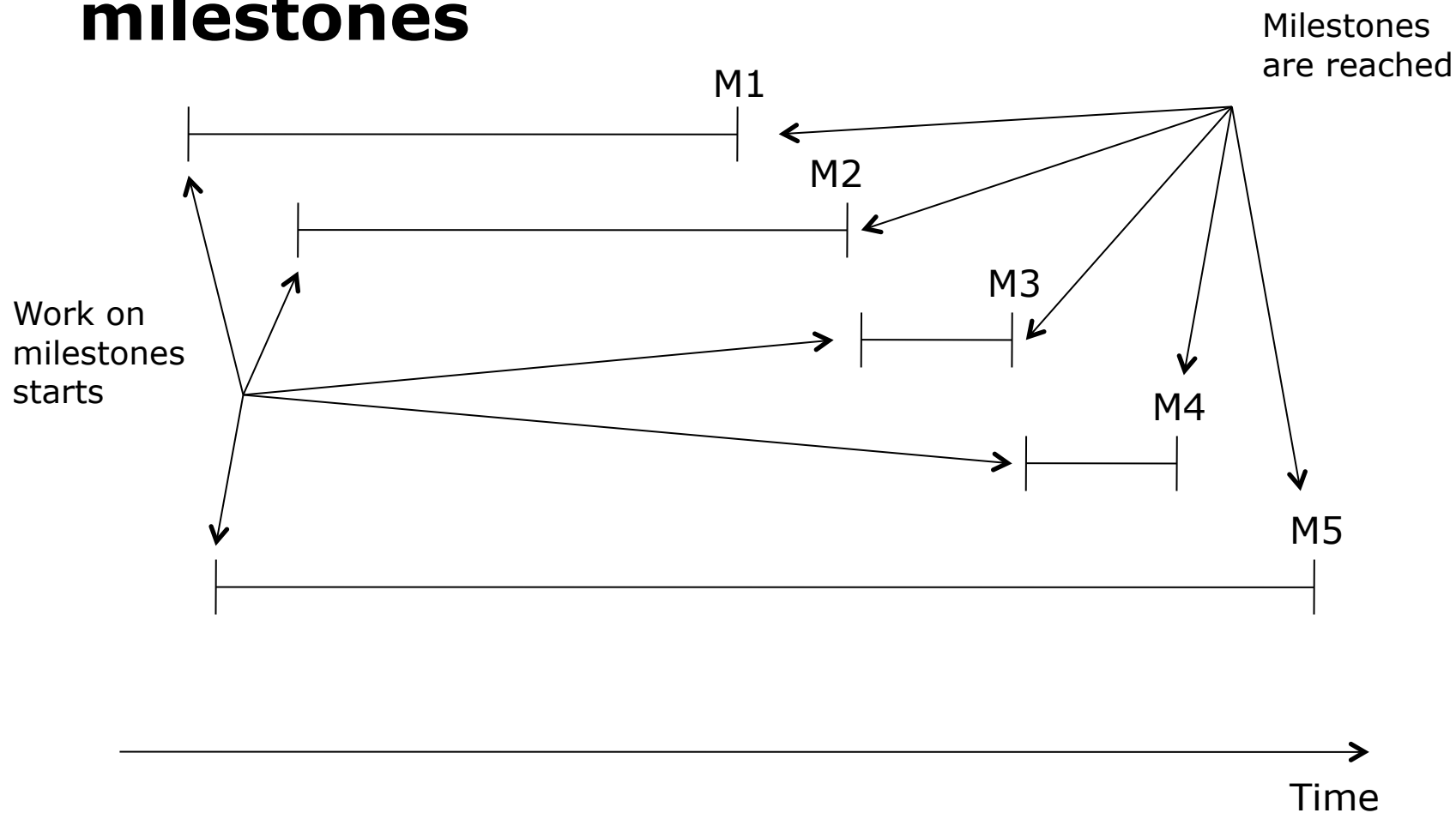
- A plan at the global level should not need to be reassessed if changes occur in the activity level
- Important decision-making points and deliverables in the project should be milestones

Milestone plan

Logical dependencies
between states

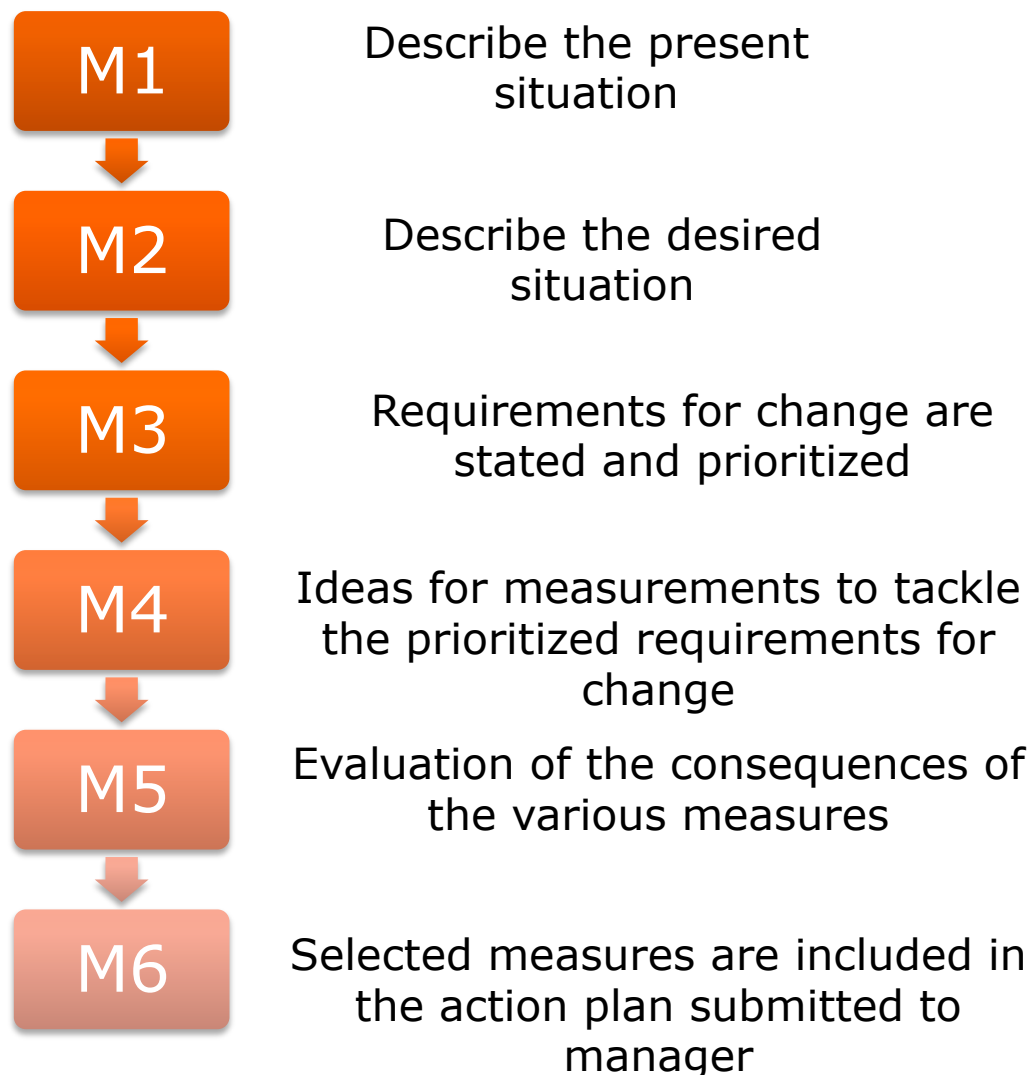


Correlation between activities and milestones

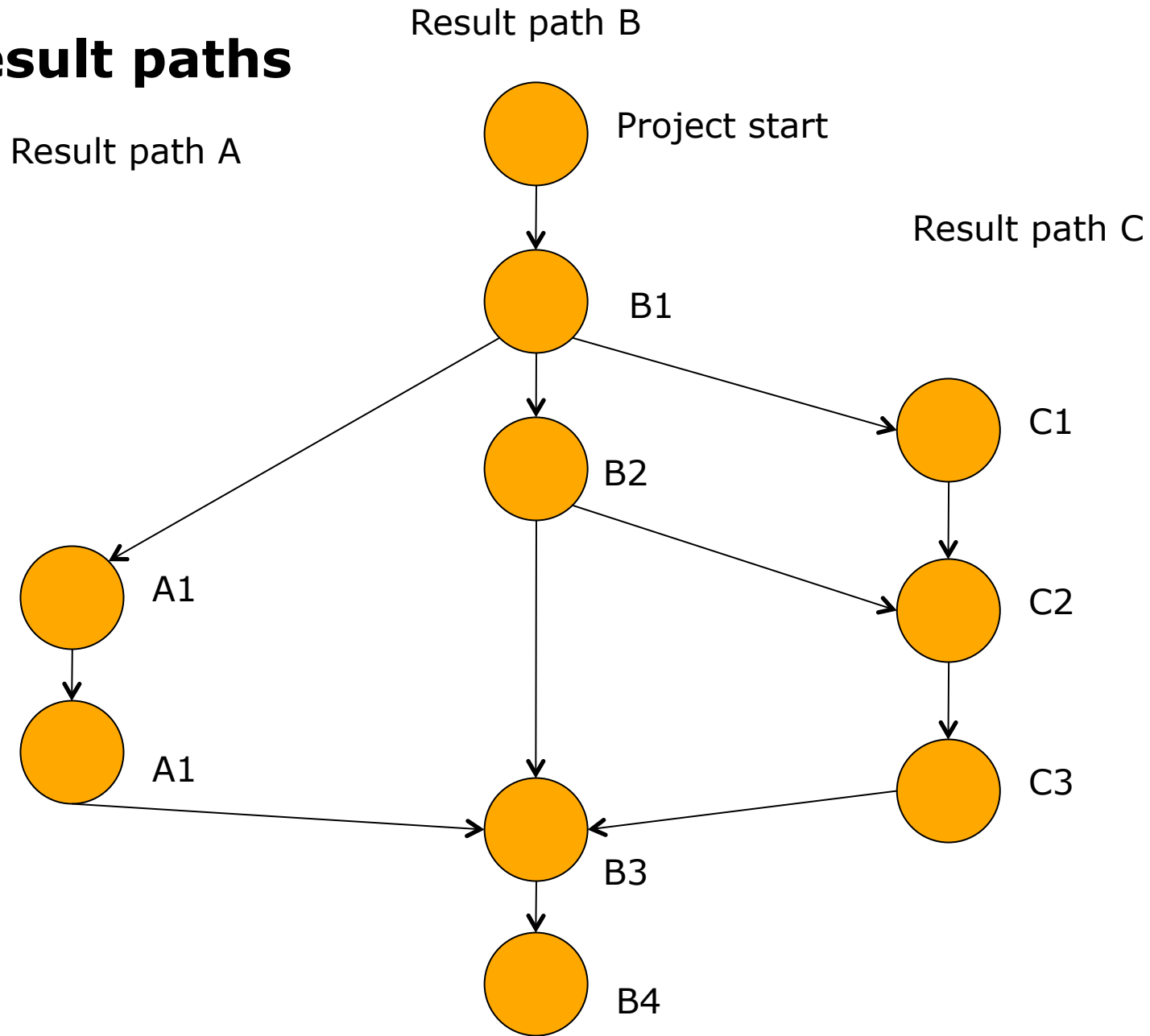


Milestone plan example

**Excellent
physical work
environment**



Result paths



Mission Breakdown Structure



Evaluation of milestone plan

- Is it balanced?
- Is it logical?
- Does it have good results paths?
- Are the milestones suitable?
- Is it an overview plan?

Exercise: Milestones

Create a Milestone Plan for holding a
birthday/bachelor/wedding party

Global (milestone) organizing

- Communicate effectively
- Allocate tasks to the right expertise
- Include people in a project as long as they have tasks to perform
- Clarify "rules of the game"
- Clarify roles

Milestone Responsibility Chart

	X	Y	Z	Explanation
Milestone I	D			X has full responsibility for the decision
Milestone II	D	d		Y approves professional quality. X has final responsibility for the decision.
Milestone III	D	d	d	Y and Z agree jointly but X takes the final decision
Milestone IV		d	d	Y and Z must agree and take decision jointly

Milestone Responsibility Chart

Roles

X: executes the job

D: takes decisions solely or ultimately

d: takes decisions jointly or partly

P: manages work and control progress

T: provides tuition on the job

C: must be consulted

I: must be informed

A: available to advise

Example: Milestone Responsibility Chart

	Project Manager	Managing director	Line managers	Personnel consultant	Committee	External consultant
M1: Describe the present situation	X/P	A	C	X	X	T
M2: Describe the desired situation	X/P	D	d	X	C	
M3: Requirements for change	X/P			X	I	
M4: Ideas for measures	X/P		C	X	C	A
M5: Evaluation of the consequences	X/P		X		I	
M6: Action plan	X/P		C	X	C	

Milestone Responsibility Chart

- A party may well have several roles simultaneously
- One person may be included in several parties
- There should not be two capital D's on the same line!
- There should neither be two capital P's on the same line!

Milestone Responsibility Chart

Horizontal analysis: Review each milestone individually and evaluate the work to achieve it

Vertical analysis: Assess total workload for those involved in the project

Time scheduling

Two different scenaria may exist:

- Completion date determined by the project
- Externally imposed completion date

Time scheduling – project determined

- The feasibility study is a good method for obtaining a basis for estimating the time and resources in the project
- Anticipated completion times for respective milestones should be entered on the milestone plan
- Division into phases and sub-projects make subsequent time planning more certain

Time scheduling – project determined

What we need:

- the milestone plan
- the milestone responsibility chart
- overview of most time- and resource-consuming activities

Time scheduling – externally imposed

- Based on market considerations
- Based on a strategic decision
- Sub-project in a larger project
- Decision by public authorities
- Part of an educational curriculum

Rough activity overview



M1: Describe the present situation -Prepare a questionnaire

- Wait for response
- Process and report the replies

M2: Describe the desired situation -Interview line managers

- Prepare a proposal on the desired situation
- Decide on the desired situation

M3: Requirements for change -Identify the most important

M4: Ideas for measures -Hold a brainstorming session

M5: Evaluation of the consequences -Assess the measures

- Calculate cost estimates

M6: Action plan -Select the measures to be included in the plan

- Calculate the measures in a plan
- Develop an action plan in detail

Rough activity overview



- If the work is performed in a concentrated manner, without any interruptions, how many days (or hours or weeks) will it take?
- Look more closely at the resource-consuming activities involved in reaching each milestone

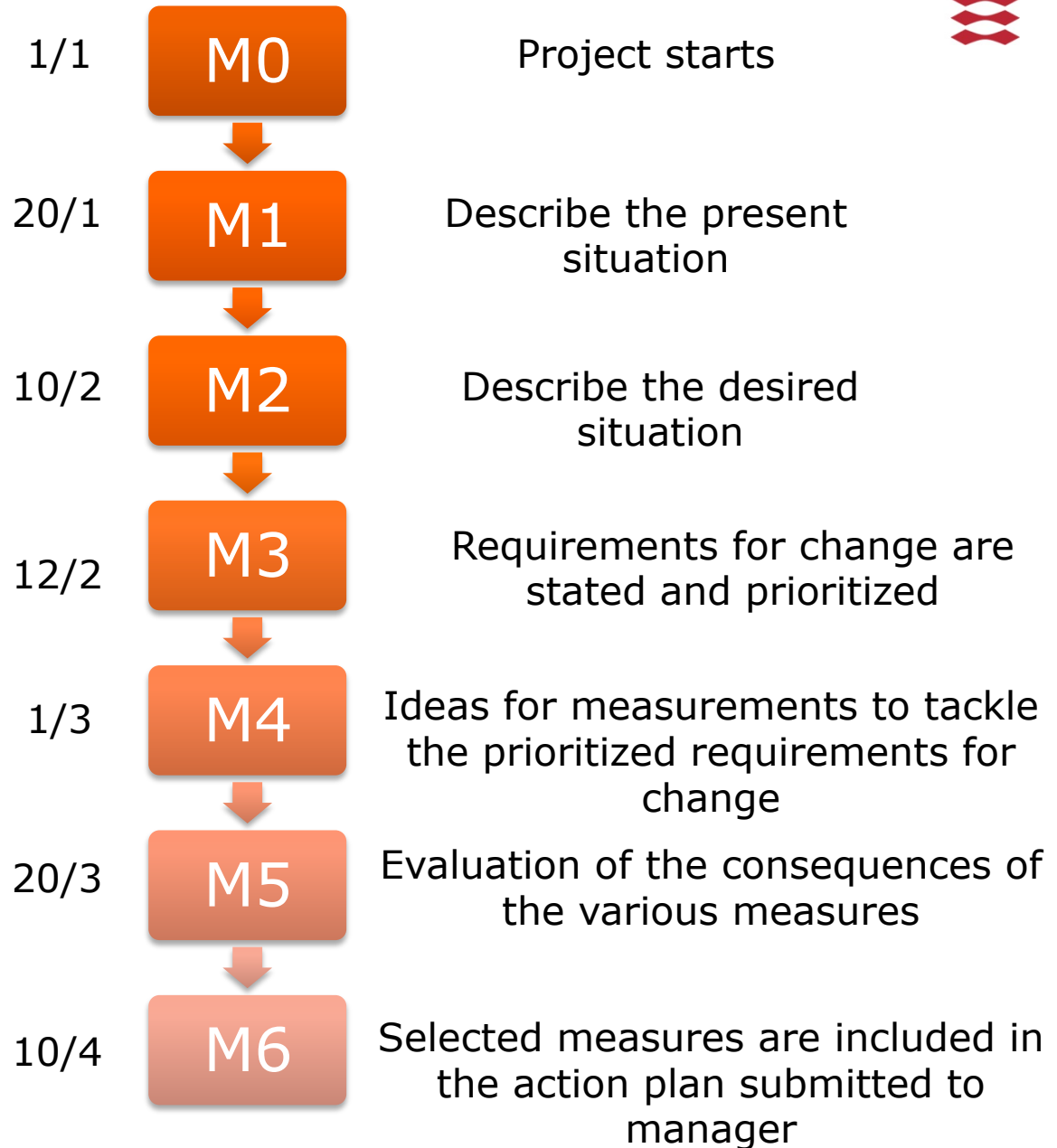
Milestone responsibility chart with time scheduling

Man-days	Start	Week							End		Project Manager	Managing director	Line managers	Personnel consultant	Committee	External consultant
		2	4	6	8	10	12	14								
10	1/1	●	—	●					20/1	M1	X/P	A	C	X	X	T
15	10/1	●	—	●					10/2	M2	X/P	D	d	X	C	
1	10/2				●	●			12/2	M3	X/P			X	I	
5	10/2				●	—	●		1/3	M4	X/P		C	X	C	A
5	1/3					●	—	●	20/3	M5	X/P		X		I	
10	20/3						●	—	●	10/4	M6	X/P		C	X	C

Milestone plan with time scheduling



**Excellent
physical work
environment**



Exercise: Milestone Responsibility Chart

Create a Milestone Responsibility Chart
with time scheduling for holding a
birthday/bachelor/wedding party

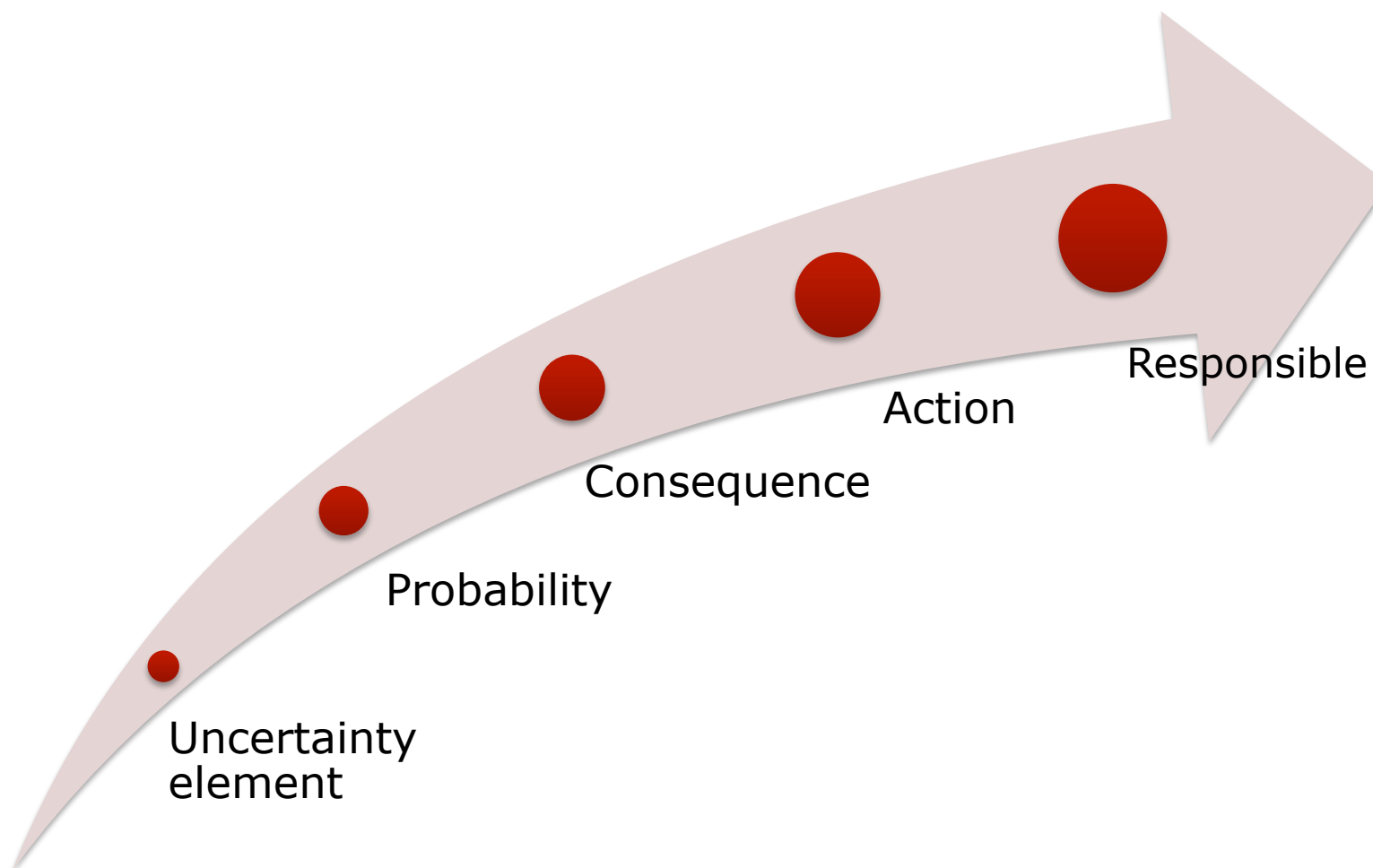
Uncertainty analysis

- General uncertainty evaluation
- Milestone-specific uncertainty evaluation

General uncertainty analysis

- Environment (*external conditions, eg. competitors, nature*)
- Project plans and project organization (*internal conditions, eg. using unfamiliar technology*)
- Conduct of the decision-makers (*relationship between base organization and project*)
- Access to resources in the project (->>-,)

Milestone-specific uncertainty analysis



Uncertainty matrix

	Uncertainty element	Probability	Consequence	Action	Responsible
M1: Describe the present situation	Dishonest responses	Small	Large (quality)	Information and motivation	Project manager
	Project members busy with other work	Medium	Large (time)	Agreement with PM	PM
M2: Describe the desired situation		Medium	Large (time)	MD asks them to allocate time	PM

Exercise: Uncertainty Analysis

Add an Uncertainty Analysis to the Project Plan for holding a birthday/bachelor/wedding party

Detail (activity) planning

- Identify all the activities that must be performed to reach a milestone
- Identify the activities that will delay the overall project if they are delayed and put extra focus

For each activity:

- Identify all the people that are involved
- Estimate the necessary work effort
- Estimate the work duration and placement in calendar time
- Consider the relationship with other activities

Detail (activity) planning

- Should not be done before it is strictly necessary
- Thoroughness and precision are more important than creativity
- A single activity should not be large in work effort and calendar time
- It must be possible to check that each activity has been completed

Rough activity overview



- M1: Describe the present situation** - Prepare a questionnaire
- Wait for response
 - Process and report the replies

Good starting point for activity planning BUT:

- The above list was not intended to be complete
- Activities already completed have raised the level of knowledge
- A completely different approach than initially considered may be now chosen
- The level of ambition may have changed significantly

Activity responsibility chart for the first milestone

M1.1: Draft of questionnaire

M1.2: Gather views on questionnaire

M1.3: Final form of questionnaire

M1.4: Mailing list

M1.5: Send out questionnaire

M1.6: Send out reminders

M1.7: Process the replies

M1.8: Draw up the report

Activity responsibility chart for the first milestone

Man - days	Start	Week			End		Project Manager	Managing director	Head production	Head sales	Head personnel	Personnel consultant	External consultant
		1	2	3									
4	1/1	●—●			6/1	M1.1	X/P					X	
1	8/1		●—●		10/1	M1.2	P	A	C	C	C		
1	9/2		●—●		11/1	M1.3	X/P					X	
1	1/1	●—●—●			10/1	M1.4						X/P	T
0.5	12/1		●		12/1	M1.5						X/P	
0.5	17/1			●	17/1	M1.6						X/P	
2	12/1		●—●		19/1	M1.7	X/P					X	A
3	16/1			●—●	20/1	M1.8	X/P					X	A

Responsibility charts

- Principle responsibility chart: Clarifies the role of different parties in the **project work**
- Milestone responsibility chart: Clarifies the role of different parties in **achieving milestones**
- Activity responsibility chart: Clarifies the role of different individuals in **carrying out activities**

**GIVE A CONDENSED DESCRIPTION OF WHAT HAS BEEN
AGREED UPON**

Exercise: Activity Planning

Create an Activity Responsibility Chart for
holding a birthday/bachelor/wedding
party

Questions?

